

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of:

MOKVELD, et al.

Group Art Unit: not assigned

Application No.: not assigned

Examiner: not assigned

Filed: April 26, 2001

FOR: PROCESS FOR THE PRODUCTION OF A SHAPED ARTICLE

* * * * *

April 26, 2001

PRELIMINARY AMENDMENT

Hon. Commissioner of Patents
Washington, D.C. 20231

Sir:

Prior to examination on the merits, please enter the following amendment in the application as follows:

IN THE SPECIFICATION:

Page 1, before the first paragraph, please insert the following new paragraph:

--This is a continuation of International Application No. PCT/NL99/00097 filed February 24, 1999, which designates the U.S., and that International Application was published under PCT Article 21(2) in English.

IN THE CLAIMS:

Please enter the following amended claims:

2. Process for the production of a shaped article according to Claim 1, wherein the polyolefin fibres are highly oriented polyethylene fibres having an intrinsic viscosity of at least 5 dl/g and a modulus of tension of at least 800 g/den.
3. (Amended) Process for the production of a shaped article according to Claim 1, wherein the solvent has been applied by distributing the solvent on one or more of the fibre layers before compression.
4. (Amended) Process for the production of a shaped article according to Claim 1, wherein the solvent has been applied as a result of the fibre layers containing solvent-containing polyolefin fibres with a solvent content of 0.02 – 25 wt.%.
5. (Amended) Process according to Claim 1, wherein the polyethylene fibres have a fineness of less than 5 denier per filament.
6. (Amended) Process according to Claim 1, wherein the fibre layers contain unidirectionally oriented fibres and at most 30 wt.% matrix (relative to the total weight of the fibre layer), the direction of the fibres in the fibre layers being at an angles relative to that of the neighbouring fibre layers.
7. (Amended) Process for the production of an anti-ballistic shaped article according to Claim 1, wherein the solvent content is 0.05 – 5 wt.%.
8. (Amended) Process for the production of an anti-ballistic shaped article according to Claim 1, wherein the chi-parameter of the solvent relative to polyethylene (at 289 °K) is less than 0.5.
9. (Amended) Process for the production of an anti-ballistic shaped article according to Claim 1, wherein the solvent is a non-volatile paraffin.

MOKVELD, et al. - APPLICATION DATED: April 26, 2001

10. (Amended) Process for the production of an anti-ballistic shaped article according to Claim 1, wherein compression is carried out at a pressure which is higher than 165 bar, at a compression temperature which is higher than 125°C and that the solvent content is 0.05 – 5 wt . %.
11. (Amended) Shaped article obtained according to a process of Claim 1.
13. (Amended) Shaped article according to Claim 11, wherein the SEA on impact of an AK47 MSC point is at least 115 J/kg/m².

Please cancel claim 15 without prejudice or disclaimer.

MOKVELD, et al. - APPLICATION DATED: April 26, 2001

REMARKS

The specification has been amended to incorporate information regarding the priority application. Claims 2-10, 11 and 13 have been amended to correct minor idiomatic errors and to eliminate multiple dependency of the claims.

It is believed that the application is in condition for allowance. Accordingly, early and favorable notice of allowance of the present application is respectfully requested.

Respectfully submitted,

PILLSBURY WINTHROP LLP

By:



Paul L. Sharer

Reg. No. 36,004

Irina S. Zemel

Reg. No. 43,402

Tel. No.: (202) 861-3649

Fax No.: (202) 822-0944

1100 New York Ave., N.W.
Ninth Floor - East Tower
Washington, D.C. 20005
(202) 861-3000

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

First full paragraph has been added.

IN THE CLAIMS:

The claims are amended as follows:

2. (Amended) Process for the production of a shaped article according to Claim 1, [characterized in that] wherein the polyolefin fibres are highly oriented polyethylene fibres having an intrinsic viscosity of at least 5 dl/g and a modulus of tension of at least 800 g/den.
3. (Amended) Process for the production of a shaped article according to Claim 1 [or Claim 2, characterized in that], wherein the solvent has been applied by distributing the solvent on one or more of the fibre layers before compression.
4. (Amended) Process for the production of a shaped article according to [any one of Claims 1-3, characterized in that] Claim 1, wherein the solvent has been applied as a result of the fibre layers containing solvent-containing polyolefin fibres with a solvent content of 0.02 – 25 wt.%.
5. (Amended) Process according to [any one of Claims 1-4, characterized in that] Claim 1, wherein the polyethylene fibres have a fineness of less than 5 denier per

filament.

6. (Amended) Process according to [any one of Claims 1-5, characterized in that] Claim 1, wherein the fibre layers contain unidirectionally oriented fibres and at most 30 wt.% matrix (relative to the total weight of the fibre layer), the direction of the fibres in the fibre layers being at an angles relative to that of the neighbouring fibre layers.
7. (Amended) Process for the production of an anti-ballistic shaped article according to [any one of Claims 1-6, characterized in that] Claim 1, wherein the solvent content is 0.05 – 5 wt.%.
8. (Amended) Process for the production of an anti-ballistic shaped article according to [any one of Claims 1-7, characterized in that] Claim 1, wherein the chi-parameter of the solvent relative to polyethylene (at 289 °K) is less than 0.5.
9. (Amended) Process for the production of an anti-ballistic shaped article according to [any one of Claims 1-8, characterized in that] Claim 1, wherein the solvent is a non-volatile paraffin.
10. (Amended) Process for the production of an anti-ballistic shaped article according to [any one of Claims 1-8, characterized in that] Claim 1, wherein compression is carried out at a pressure which is higher than 165 bar, at a compression temperature which is higher than 125°C and that the solvent content is 0.05 – 5 wt.%.
11. (Amended) Shaped article [obtainable] obtained according to a process of [any one of Claims 1-10] Claim 1.
13. (Amended) Shaped article according to Claim 11 [or Claim 12, characterized in that], wherein the SEA on impact of an AK47 MSC point is at least 115 J/kg/m².

[illegible]

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100